

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT - REVISED

PERMITTEE

Modine Manufacturing Company  
Attn: Paul Arneson  
1500 DeKoven Avenue  
Racine, Wisconsin 53403

Application No.: 87110005  
Applicant's Designation: LUBRICANTS  
Subject: Heat Exchanger Manufacturing  
Date Issued:  
Location: 4400 Ringwood Road, Ringwood

I.D. No.: 111811AAA  
Date Received: December 6, 2004  
Expiration Date: May 8, 2007

This permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of powder paint booth with curing oven, a paint hook burn-off oven/semi-solid waste dryer controlled by afterburner, touch-up paint operations, metal forming lubricating operations, two brazing ovens controlled by two dust collectors and waste water evaporator pursuant to the above-referenced application.

This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 25 tons per year for volatile organic material (VOM)). As a result, the source is excluded from requirements to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit are described in Attachment A.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permits issued for this location.
2. This permit is issued based upon the touch-up painting operations being exempt from control requirements of 35 Ill. Adm. Code 218.204 due to compliance with exemption level of 218.208(a): daily VOM emission from coating operations never exceeding 15 lbs/day before the application of capture systems and control devices.
3. VOM emissions from the touch-up paint operations shall not exceed 15 pounds per day and 0.9 tons per year. Compliance with the annual limit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months.

4. Lubricant usage and VOM emissions from the lubricating operations shall not exceed the following limits:

2.5 tons of VOM per month and 23.0 tons VOM per year

The VOM emissions shall be determined from the following equation:

$$E = L - W \times C_w$$

Where:

E = VOM emissions (tons)

L = Amount of lubricant purchased (tons)

W = Certified amount of waste lubricant shipped-off (tons)

C<sub>w</sub> = Certified VOM content of the waste lubricant (fraction)

Compliance with the annual limit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months.

5. Operation and emissions of the natural gas fired equipment shall not exceed the following limits:

Natural Gas Usage: 15 mmscf/mo, 100 mmscf/yr

<u>Pollutant</u>	<u>Emission Factor</u> <u>(Lb/mmscf)</u>	<u>Emissions</u>	
		<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
Nitrogen Oxides (NO <sub>x</sub> )	100	0.8	5.0
Carbon Monoxide (CO)	84	0.6	4.2
Particulate Matter (PM)	7.6	0.06	0.4
Volatile Organic Material (VOM)	5.5	0.04	0.3

These limits are based on the maximum equipment operations and standard emission factors given by AP-42. Compliance with the annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months.

6. This permit is issued based on negligible emissions of particulate matter from the powder paint booth, evaporator, two brazing ovens and paint hook burn-off oven/waste dryer. For this purpose emission from each emission source shall not exceed nominal emission rates of 0.1 lb/hr and 0.44 ton/yr.
- 7a. The afterburner controlling burn-off oven/waste dryer shall be in operation at all times when the associated emission unit is in operation.
- b. The afterburner shall be equipped with a temperature indicator.

8. The Permittee shall maintain daily records of the following items:
  - a. Amount of touch-up paint used (gal/day);
  - b. The VOM content of touch-up paint (lb/gal); and
  - c. The VOM emission calculation (lb/day).
9. The Permittee shall maintain monthly records of the following items:
  - a. Touch-up paint usage (gal/mo, gal/yr) and its VOM content (lb/gal);
  - b. Amount of lubricant purchased (ton/mo, ton/yr);
  - c. Certified amount of waste lubricant shipped off (ton/mo, ton/yr) and its VOM content (fraction);
  - d. Natural gas usage (mmscf/mo, mmscf/yr); and
  - e. Paint burn-off oven/waste dryer afterburner monitoring data.
10. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.
11. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.
12. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Compliance Section (#40)  
P.O. Box 19276  
Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Illinois EPA regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
9511 West Harrison  
Des Plaines, Illinois 60016

13. The Permittee shall submit the following additional information with the Annual Emissions Report, due May 1st of each year:
- a. Touch-up paint usage (gal/yr);
  - b. Lubricant purchased (ton/yr);
  - c. Waste lubricant shipped off (gal/yr); and
  - d. Natural gas usage (mmcf/yr).

It should be noted that this permit has been revised to implement process modification described in Construction Permit 04120005.

If you have any questions on this permit, please call Valeriy Brodsky at 217/782-2113.

Donald E. Sutton, P.E.  
Manager, Permit Section  
Division of Air Pollution Control

DES:VJB:

cc: IEPA, FOS Region 1  
Lotus Notes

Attachment A - Emissions Summary

This attachment provides a summary of the maximum emissions from the heat exchanger manufacturing facility operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the level (i.e., 25 tons per year for volatile organic material (VOM)), at which this source would be considered a major source for purposes of the Clean Air Act Program Permit (CAAPP). Actual emissions from this source will be less than predicted in this summary to the extent that the quantity of material processed by the source and control measures used are more effective than that required in this permit.

## E M I S S I O N S (ton/yr)

Emission Units	VOM	NO <sub>x</sub>	CO	PM	Single HAP	Total HAP
Touch-up Coating Operations	0.9					
Lubrication Operations	23.0					
Gas Combustion Units	0.3	5.0	4.2	0.4		
Powder Coating Booth				0.44		
Burn-off Oven				0.44		
Brazing Ovens				0.44		
Waste evaporator				0.44		
Plant-wide total	24.2	5.0	4.2	2.2	<10	<25

DES:VJB: